

REMARKS

Claims 30, 32, 38, 40, 42 and 43 have been amended. Claim 36 has been canceled without prejudice or disclaimer of the claimed subject matter.

The Examiner has rejected applicants' claims 30, 32-36, 38 and 40 under 35 U.S.C. §103(a) as being unpatentable based on the Hinoue, et al. patent (US Patent No. 6,879,710) taken with the Rosenberg, et al. patent (US Patent No. 6,429,846). Claims 42 and 43 have also been rejected under 35 U.S.C. §103(a) as being unpatentable based on the latter two patents taken with the Liu, et al. patent (US Patent No. 5,804,462) and the Yu reference (US Published Patent Application No. 2004/0025029). With respect to applicants' claims, as amended, these rejections are respectfully traversed.

Applicants' independent claim 30 has been amended to better define applicants' invention. In particular, amended claim 30 recites an information input/output apparatus for controlling an operation of a target apparatus on the basis of a user authentication result associated with a user who operates the target apparatus, comprising: an image display configured to visually display predetermined image information; and a menu presentation unit, which is arranged on the image display, configured to present a list of a plurality of menu items used to execute an operation of the target apparatus, wherein the menu presentation unit has a plurality of units arranged in a matrix, each of the plurality of units including a haptic information acquisition unit configured to acquire haptic information of the user on the basis of a position of the menu item that the user touches with a finger of the plurality of menu items presented by said menu presentation unit and a haptic information output unit configured to output information perceivable by the user upon user's touching the haptic information output unit with the finger and arranged at the position of the plurality of

menu items; and a user authentication unit configured to authenticate the user on the basis of the haptic information acquired by said haptic information acquisition unit.

Independent claims 32, 38, 40, 42 and 43 have similar features and have been similarly amended. The underlined features in claim 30 are supported by the description in applicants' specification at page 16, lines 7-16, page 65, line 15, through page 67, line 18 and by FIG. 5 and FIG. 22.

Such a construction is not taught or suggested by the cited art of record. More particularly, the Examiner has argued as follows with respect to the Hinoue, et al. and Rosenberg, et al. patents:

“. . . Hinoue does not teach a haptic information output unit configured to output information perceivable by the user upon user's touching the haptic information output unit with the finger and arranged at the position of the plurality of menu items.

However Rosenberg does teach a haptic information output unit configured to output information perceivable by the user upon user's touching the haptic information output unit with the finger and arranged at the position of the plurality of menu items . . .

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Rosenberg in the device of Hinoue by incorporating the haptic output elements of Rosenberg into the touch screen of Hinoue, where the motivation to combine was to provide haptic output sensations to the user to indicate an event occurring on the display.”

Applicants disagree. More particularly, looking at the Rosenberg, et al. patent it discloses a touch pad 16 for moving a cursor 20 on a display device 12 in response to a movement of a fingertip thereon (See, column 4, lines 2-5). The touch pad 16 is configured to provide the ability to output haptic feedback such as tactile sensations to the user who is physically contacting the touch pad 16 (See, column 4, line 65 - column 5, line 1). The touch

pad 16 is also disclosed as an external input unit for controlling the cursor on a display device 12 (See, column 3, lines 64-66).

The Rosenberg, et al. patent thus teaches the use of a touch pad adapted to output haptic feedback information to a user. The Rosenberg, et al. patent, however, fails to teach or suggest use of such haptic feedback information on the display device 12 of the system. The touch pad in the Rosenberg, et al. patent, moreover, is completely different from the display/fingerprint reading unit 34 of the Hinoue, et al. patent. This marked difference significantly detracts from any attempt at incorporating the touch pad 16 into the display.

Accordingly, contrary to the Examiner's conclusion, a skilled artisan would not be motivated to use the touch pad and haptic feedback scheme in the Inoue, et al. patent in the display/fingerprint reading unit of the Hinoue, et al. patent. Applicant's amended independent claims 30, 32, 38, 40, 42 and 43, and their respective dependent claims, thus patentably distinguish over the cited Inoue, et al. and Rosenberg, et al. patents. The Liu, et al. patent and Yu reference fail to add anything to the Inoue, et al. and Rosenberg, et al. patents to change this conclusion.

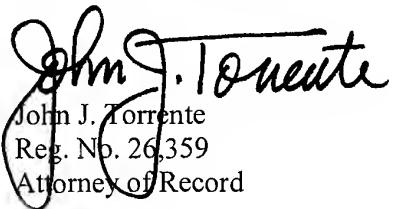
Additionally, even assuming, arguendo, that a skilled artisan would somehow consider using the touch pad and haptic feedback scheme of the Rosenberg, et al. patent in the display/fingerprint reading unit of the Hinoue, et al. patent, the combined unit would still not result in applicants' claimed invention. Specifically, the resultant system would not teach or suggest "an image display configured to visually display predetermined image information; and a menu presentation unit, which is arranged on the image display, . . . wherein the menu presentation unit has a plurality of units arranged in a matrix, each of the plurality of units including a haptic information acquisition unit . . . and a haptic information output unit . . ."

Nothing is disclosed in any of the references as to such matrix arrangement. These features further patentably distinguish certain of applicants' amended claims over the cited references.

In view of the above, it is submitted that applicants' claims, as amended, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested.

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Respectfully submitted,


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